

## Recombinant Mouse Interleukin 12 Protein, His tagged

Cat. No. IL12-21M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant mouse IL12b/IL12a protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
<b>Species</b>	Mouse
<b>Source</b>	Baculovirus
<b>ProteinLength</b>	23-335aa(p40)/23-215aa(p35)
<b>Description</b>	IL12b/IL12a, also known as interleukin 12 (subunit beta/alpha), is a cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC. It is a key mediator of cellular-immunity and induces the differentiation of Th1 cells from precursor T helper cells. As it is associated with IL23A to form the IL-23 interleukin, it induces autoimmune inflammation and is responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.
<b>Tag</b>	C-His
<b>Form</b>	Liquid
<b>Bio-activity</b>	The activity is determined by the IFN-g ELISA in a using NK-92 human natural killer cells. The ED50 for this effect is less or equal to 10 ng/mL.

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<b>Molecular Mass</b>	58.3 kDa
<b>AA Sequence</b>	<p>IL12B (p40): MWELEKDVYVVEVDWTPDAPGETVNLTCDTPEEDDITWTSDQRHGVI  GSGKTLTITVKEFLDAGQYTCHKGGETLSHSHLLLHKKENGIWSTEILKNFKNKTF  CEAPNYSGRFTCSWLQQRNMDLKFNIKSSSSSPDSRAVTCGMASLSAEKVTLDQR  DYEKYSVSCQEDVTCPTAEETLPIELALEARQQNKYENYSTSFFIRDIIKPDPPK  MKPLKNSQVEVSWEYPDSWSTPHSYFSLKFFVRIQRKKEKMKETEEGCNQGAF  VEKTSTEVQCKGGNVCVQAQDRYYNSSCSKWACVPCRVR</p> <p>IL12A (p35): RVIPVSGPARCLSQSRNLLKTTDDMVKTAREKCLKHYSCTAEDIDH  EDITRDQTSTLKTCLPLELHKNESCLATRETSSTTRGSCSLPPQKTSMMTLCLG  SIYEDLKM  MYQTEFQAINAALQNHNHQQIILDKGMLVAIDELMQSLNHNGETLRQKPPVGEAD  PYRVKMKLCILLHAFSTRVVTINRVMGYLSSA</p>
<b>Endotoxin</b>	< 1 EU/μg, determined by LAL method.
<b>Purity</b>	> 95% by SDS-PAGE
<b>Applications</b>	SDS-PAGE, Bioactivity
<b>Storage</b>	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.
<b>Concentration</b>	0.5 mg/mL (determined by Bradford assay)
<b>Storage Buffer</b>	Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol
<b>Notes</b>	For research use only. This product is not intended or approved for human, diagnostics or veterinary use.
<b>GenelD 2</b>	<a href="#">16159</a>

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- References**
1. Zhang X., et al, (2015) J Immunol. 195:1665-1675.
  2. Zamani A., et al, (2017) Immune Netw. 17:186-191.

## GENE INFORMATION

**Gene Name** IL12b interleukin 12b [ *Mus musculus* (house mouse) ]

**Official Symbol** IL12B

**Synonyms** IL12B; interleukin 12b; interleukin-12 subunit beta; CLMF p40; IL-12 p40; IL-12 subunit p40; IL-23 subunit p40; cytotoxic lymphocyte maturation factor 40 kDa subunit; p40; Il-12b; Il12p40; Il-12p40;

**Gene ID** 16160

**mRNA Refseq** NM\_001303244

**Protein Refseq** NP\_001290173

**UniProt ID** P43432

**Gene Name 2** IL12a interleukin 12a [ *Mus musculus* (house mouse) ]

**Official Symbol 2** IL12A

**Synonyms 2** IL12A; interleukin 12a; interleukin-12 subunit alpha; CLMF p35; IL-12 subunit p35; interleukin 12a p35 subunit; cytotoxic lymphocyte maturation factor 35 kDa subunit; p35; LI12a; Il-12a; IL-12p35; MGC151228; MGC151232;

**mRNA Refseq 2** NM\_008351

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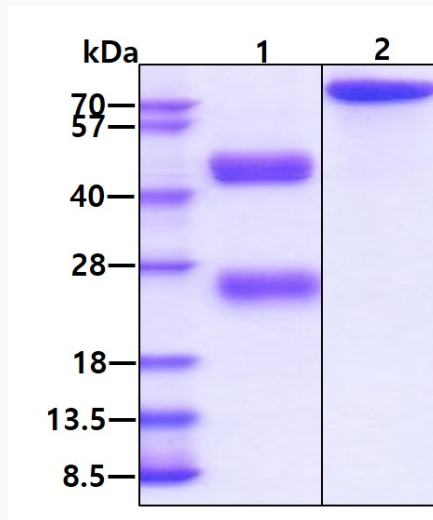
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Protein Refseq 2 NP\_032377

UniProt ID 2 P43431

SDS-PAGE

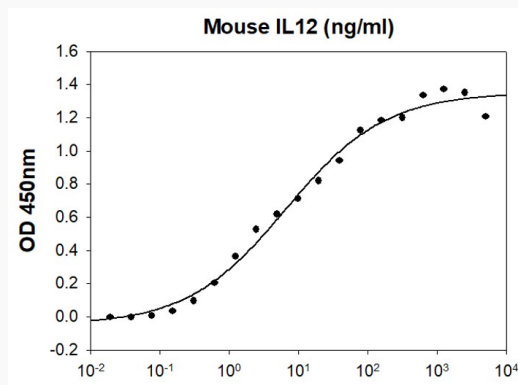


3 µg by SDS-PAGE visualized by coomassie blue stain.

Lane 1: reducing condition

Lane 2: non-reducing condition

Biological Activity




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Mouse IL12 stimulates IFN-g secretion of the NK-92 human natural killer cells. The ED50 range is less or equal to 10 ng/mL.

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